

**INTERNATIONAL AFFAIRS  
AGREEMENT INFORMATION FORM**

Please submit this agreement information form prior to submitting draft agreements.

Once completed please submit this form to:  
 Attn: Agreement Information Form, International Affairs, Office of the Dean  
 4202 East Fowler Ave, CPR107, Tampa, FL 33620  
 Interoffice Mail Point: CPR107, Office Location: Suite 475, Cooper Building, Tampa Campus

**AGREEMENT INFORMATION**

Institution Name	Universidad del Norte
City, Country	Barranquilla, Colombia
Type of Agreement (general collaboration, student exchange, specific MOU)	College of Engineering (Computer Science)
University-wide or department specific?	Initial MOUS; general agreement signed in 2001
Effective period of agreement	Indefinite; either party can terminate with 6 months notice
Sponsoring entity(ies)	College of Engineering

**INSTITUTION INFORMATION**

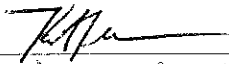
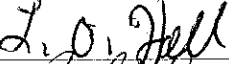
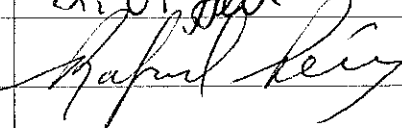
Anticipated collaboration activities under this agreement	Degree completion of UNINORTE engineering students at USF.
Please explain how the above activities align with the University's 2007-2012 strategic plan	Expanding world-class interdisciplinary research, creative, and scholarly endeavors.
Prior or current collaboration activities with this institution	n/a
General information regarding the institution	UNINORTE is the main private academic center for higher education in Colombia; the Education Ministry considers it one of the best universities in the country.

**RENEWAL OF EXISTING AGREEMENT**

Yes/No	No
Date previous agreement expired	

**SPONSOR CONTACT INFORMATION**

Contact name	Dr. Rafael Perez
Contact phone number	974-3437
Contact e-mail	perez@eng.usf.edu

ENDORSEMENT:	NAME	SIGNATURE	DATE
Faculty Member	Dr. Ken Christensen		4/15/08
Department Chair	Dr. Lawrence Hall		4/15/08
College Dean	Dr. Rafael Perez Associate Dean		4/15/08
Dean of International Affairs			



OFFICE OF INTERNATIONAL COOPERATION

05-May-2009

Rafael Pérez  
College of Engineering  
University of South Florida  
4202 E. Fowler Ave. ENB 118  
Tampa, FL, 33612

Dear Doctor Pérez:

Receive a very special greeting on my behalf. I am sending you three (3) original agreements which include the English and Spanish versions (2) of the Memorandum of Understanding between University of South Florida and Universidad del Norte. They have been signed by our Rector. Please sign and return one of the Spanish version to us.

Our institution is enthused to be working so closely with such a prestigious institution.

Sincerely,

**Jeannie H. Caicedo**  
Director, Office of International Cooperation  
E – Mail: [jcaicedo@uninorte.edu.co](mailto:jcaicedo@uninorte.edu.co)

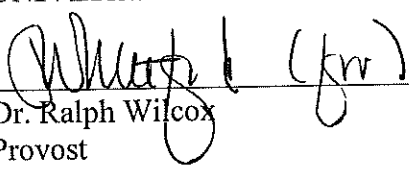
**MEMORANDUM OF UNDERSTANDING**

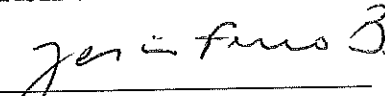
This Memorandum of Understanding (MOU) is between the Universidad del Norte (UNINORTE) in Barranquilla, Colombia and the University of South Florida (USF) Board of Trustees, a public body corporate, for its College of Engineering (CoE). Specifically, the MOU refers to the transfer of UNINORTE's Computer Science students to USF's CoE.

1. UNINORTE is interested in having their Computer Science students complete the first eight semesters of Computer Science Program (equivalent to three years of USF's Computer Science program) at its campus in Barranquilla, and then transfer to USF to complete the degree requirements.
2. UNINORTE will choose the students and submit their official application to USF through the College of Engineering's Director of Admissions and Advising.
3. UNINORTE's students must take the TOEFL, and obtain a minimum of 550 PBT or 213 CBT, to be accepted by USF. For other admission requirements the student should consult the "Admissions and Related Matters" chapter of the Undergraduate Catalog.
4. Attachment I shows course equivalency of the two Computer Science programs (UNINORTE and USF). The right column shows the courses that the students should complete at UNINORTE with a grade of C or better. This attachment includes general education course equivalency.
5. Attachment II shows the courses that the students should register, and complete with a grade of C or better, at USF to graduate with a Bachelors degree in Computer Science (BSCS).
6. Students should register for the College Level Academic Skills Test (CLAST) and Composition I in their first semester at USF. Furthermore, it is strongly recommended that all students participate in Engineering Student Services Writing Workshop help sessions regularly.
7. Courses/curricula and USF undergraduate requirements sometimes change and both parties must be in continuous communication to satisfy the requirements of this MOU.
8. With a six-month notice, either party can end this MOU.

**UNIVERSITY OF SOUTH FLORIDA**

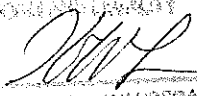
**UNIVERSIDAD DEL NORTE**

  
 Dr. Ralph Wilcox  
 Provost

  
 Dr. Jesus Ferro Bayona  
 Rector

4/29/09  
 Date

\_\_\_\_\_  
 Date

  
 MARY M. LAVANDERA  
 ATTORNEY USF

Maria Crummett

Dr. Maria Crummett  
Dean of International Affairs

4/21/08

Date

John Wiencek

Dr. John Wiencek  
Dean of Engineering

4/16/08

Date

J. Paez

Ing. Javier Paez  
Dean of Engineering

          
Date

## ATTACHMENT I

The following maps the USF Computer Science curriculum (directly from the 2007/2008 USF Undergraduate Catalog) to the UNINORTE Computer Science Curriculum. UNINORTE students are required to take the courses as listed in the right side column (but not necessarily in the semester as listed here). Any courses not taken at UNINORTE must be taken at USF from the matching left side column. Attachment II lists requirements at USF covering the missing UNINORTE courses and requiring some additional courses as well.

### Semester I

MAC 2281 Engineering Calculus I	4	4	MAT 1101 Differential Calculus
ENC 1101 Composition I	3	3	>> No equivalent <<
EGN 3000 Foundations of Engineering	1	1	IST 0010 Intro. to Systems Engineering
Science Elective	3	2	FIS 1042 Physics Lab III
Social Science Elective	3	3	Social Science Elective
<b>Total</b>	<b>14</b>	<b>13</b>	

### Semester II

MAC 2282 Engineering Calculus II	4	4	MAT 1110 Integral Calculus
PHY 2048 General Physics I	3	4	FIS 1020 Physics I
PHY 2048L General Physics I Lab	1	2	FIS 1022 Physics Lab I
ENC 1102 Composition II	3	--	>> No equivalent <<
COP 2510 Programming Concepts	3	5	IST 0030 Fundamentals of Programming I
<b>Total</b>	<b>14</b>	<b>16</b>	

### Semester III

MAC 2283 Engineering Calculus III	4	4	MAT 1120 Vectorial Calculus
PHY 2049 General Physics II	3	4	FIS 1030 Physics II
PHY 2049L General Physics II Lab	1	2	FIS 1032 Physics Lab II
COP 3514 Program Design	3	5	IST 2080 Fundamentals of Programming II
Science Elective	3	4	FIS 1020 Physics III
<b>Total</b>	<b>14</b>	<b>19</b>	

### Semester IV

CDA 3103 Computer Organization	3	4	IST 4011 Processors and Assemblers
COT 3100 Intro Discrete Structures	3	3	IST 4330 Discrete Structures
COP 3331 Object Oriented Design	3	5	IST 2110 Object Oriented Programming
Historical Perspectives Elective	3	3	History Elective
<b>Total</b>	<b>12</b>	<b>15</b>	

### Summer Semester

EEL 4851 Data Structures	3	5	IST 4031 Data Structures I
CDA 3201 Computer Logic Design	3	3	IST 7071 Commutation
CDA 3201L Computer Logic Design Lab	1	--	>> No equivalent <<
EGN 4450 Linear Systems	2	3	MAT 1031 Linear Algebra
<b>Total</b>	<b>9</b>	<b>11</b>	

**Semester V**

CDA 4205 Computer Architecture	3	3	IST 7100 Computer Structure
COP 4600 Operating Systems	3	3	IST 7081 Operating Systems
COT 4400 Analysis of Algorithms	3	3	IST 4310 Algorithms and Complexity
EGN 3443 Engineering Statistics	3	3	EST 1040 Statistics I
Social Science Elective	3	3	Social Science Elective
Total	15	15	

**Semester VI**

CSE Theory Elective	3	3	Systems Engineering Electives
CSE Software Elective	6	3	IST 7121 Software Design I
		3	IST 7122 Software Design II
CSE Elective	3	3	Systems Engineering Electives
ENC 3246 Communications for Engineers	3	--	>> No equivalent <<
Total	15	12	

**Semester VII**

Fine Arts Elective	3	3	Fine Arts Elective
ALAMEA Elective	3	3	Latin American History Elective
Historical Perspective	3	3	History Elective
CS&E Elective	6	3	IST 7410 Compilers
		3	IST 7191 Computer Networks
Total	15	15	

**Semester VIII**

CIS 4250 Ethical Issues (6A MW/MI)	3	--	>> No equivalent <<
Upper Level Humanities, Social Science or Fine Arts Elective	3	3	History and Social Science Elective
CS&E Elective	6	3	IST 7111 Databases or
		3	Systems Engineering Electives
		3	Systems Engineering Electives
Total	12	9	

**Notes:**

USF credit hours are semester hours. UNINORTE credit hours are equivalent and are based on a 16 week UNINORTE semester.

Additional courses at UNINORTE (not covered at USF) include:

- MAT 0090 Geometry 3
- MAT 1012 Algebra and Trigonometry 3
- IST 4031 Data Structures II 3
- MAT 4011 Differential Equations 3
- MAT 4051 Numerical Analysis 3
- MAT 4021 Discrete Mathematics 3

- EST 1050 Statistics II 3
- IST 7420 Optimization 3
- GPY 1010 Formulation and Evaluation of Projects 3
- ELP 7170 Elective in Management 3
- ELP 8110 Global Elective III 3
- INV 7230 Senior Project I 1
- INV 7311 Senior Project II 5

UNINORTE has technical electives in the area of Systems Engineering in three categories as listed below:

Computers Networks Electives

- ELP 7192 Internetworking with TCP/IP 3
- ELP 7194 Networking with Linux 3

Computer Science Electives

- ELP 8012 Artificial Intelligence 3
- ELP 8011 Cryptography 3

Software Engineering Electives

- ELP 8044 Organization and Planning of E-Learning 3
- ELP 8041 Construction of Web-Oriented Software 3
- ELP 8122 Construction of Educative Software 3
- ELP 8123 Data Mining 3
- ELP 8132 Distributed Programming 3
- ELP 8133 Mobile Programming 3

UNINORTE has History and Social Science electives listed here in USF elective categories:

- Fine Arts Elective 3
- Art History 3

Social Science Electives 6 *Any two of the following:*

- Professional Ethics 3
- Humanity and Philosophy 3
- Science Tech. and Society 3
- Human Development 3
- Social Development 3
- Contemporary Social Problems 3
- Prob. of Contemp. Philosophy 3
- Theory of Knowledge 3

Historical Perspectives	6	<i>Any two of the following:</i>
○ Contemporary Latin America		3
○ Science Tech. and Society		3
○ Pre Columbian History		3
○ Colombia XIX Century		3
○ Colombia XX Century		3
○ Contemporary Europe History		3
○ Medieval Europe		3
○ Modern Europe		3
○ History of Barranquilla		3
○ Roma History		3
○ History and Philosophy		3
○ Leadership and Creativity		3
 ALAMEA Elective	 3	 <i>Any of the following:</i>
○ Contemporary Latin America		3
○ Pre Columbian History		3
○ Colombia XIX Century		3
○ Colombia XX Century		3
○ History of Barranquilla		3



## ATTACHMENT II

The following USF courses must be completed with a grade of C or better to graduate with a Bachelors degree in Computer Science (BSCS).

### Fall Semester

### Spring Semester

ENC 1101 Composition I	3	ENC 11012 Composition II	3
COT 4400 Analysis of Algorithms	3	CIS 4250 Computer Ethics	3
COP 4600 Operating Systems	3	CSE Elective – Theory	3
ENC 3211 Communications for Engineers	3	CSE Elective – Software	3
CSE Elective – Departmental	3	COT 4205 Computer Architecture	3

Must register for and take (and pass) CLAST

Of the above courses, ENC 1101, ENC 1102, ENC 3211, and CIS 4250 are required to meet USF exit requirements. The CLAST is a degree requirement. According the 2007-2008 USF Undergraduate Catalog (pages 37-38), "The College Level Academic Skills Test (CLAST) is a part of Florida's system of educational accountability. CLAST is a state-mandated achievement test that measures attainment of communication and mathematics skills expected of students completing their sophomore year in college. These skills were identified by the faculties of community colleges and state universities and adopted by the State Board of Education. A student must pass the CLAST or achieve alternate criteria to receive an Associate in Arts or a baccalaureate degree from any Florida public institution."